

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously amended) A method of achieving a dynamic channel bandwidth in a system, the method comprising the steps of:

initializing a channel aggregation strategy;
establishing a default channel aggregation for an inbound path using at least one frequency from at least one site;
establishing a default channel aggregation for an outbound path using at least one frequency from at least one site;
receiving a request for a service requiring additional bandwidth on either the inbound path or the outbound path from a device;
generating an updated channel aggregation based upon the request and the channel aggregation strategy to create an updated channel aggregation; and
signaling the updated channel aggregation to at least one mobile station via an in-band message.

2. (previously amended) The method of claim 1 further comprising the step of aggregating a plurality of channels according to the needed bandwidth and the updated channel aggregation strategy.

3. (original) The method of claim 1 further comprising aggregating a plurality of narrowband channels into at least one wideband channel based on the updated channel aggregation.

4. (original) The method of claim 3 wherein the plurality of narrowband channels are adjacent.

5. (original) The method of claim 3 wherein the plurality of narrowband channels are non-adjacent.

6. (original) The method of claim 1 further comprising dividing at least one wideband channel into a plurality of narrowband channels based on the updated channel aggregation.
7. (original) The method of claim 1 wherein the updated channel aggregation comprises dividing a channel bandwidth into at least one of the following: a plurality of narrowband channels, and a wideband channel.
8. (original) The method of claim 1 wherein the in-band message comprises at least one of: a next bandwidth and center frequency of a transmitter and a receiver of a fixed site; a minimum time duration of a next receive state of a fixed site; and a minimum time duration of a next transmit state of a fixed site.
9. (original) The method of claim 1 further comprising the step of periodically signaling the in-band message to inform newly joining mobile stations of present channel configuration.
10. (original) The method of claim 1 further comprising the steps of:
 - invoking a wideband channel when wideband services are needed; and
 - invoking non-interfering narrowband channels within a domain of the wideband channel when wideband services are not needed.
11. (previously cancelled) The method of claim 1 wherein the device is selected from a group consisting of a mobile station and a fixed host.
12. (original) The method of claim 1 wherein the step of signaling is performed via at least one fixed site.
13. (original) The method of claim 1 further comprising the step of, based on the request, determining an amount of additional bandwidth required for the service.

14. (original) A method of achieving a dynamic channel bandwidth in a system, the method comprising the steps of:

loading a channel scan list and a default channel configuration;

directed by the channel scan list, scanning a set of channels for a channel with acceptable signal quality;

receiving an in-band message having an updated channel aggregation; and

modifying transmit and receive channels based on the in-band message.

15. (original) The method of claim 14 further comprising updating the channel scan list and the default channel configuration based on the in-band message.

16. (previously amended) A system for achieving a dynamic channel bandwidth, the system comprising:

at least one fixed site;

at least one mobile station in radio frequency communication with the at least one fixed site; and

at least one resource controller, controlling the at least one fixed site, for performing the steps of:

initializing a channel aggregation strategy;

establishing a default channel aggregation for an inbound path using at least one frequency from at least one site;

establishing a default channel aggregation for an outbound path using at least one frequency from at least one site;

receiving a request for a service requiring additional bandwidth on either the inbound path or the outbound path from a device;

generating an updated channel aggregation based upon the request and the channel aggregation strategy to create an updated channel aggregation; and

signaling the updated channel aggregation to at least one mobile station via an in-band message.